

WE CLAIM:

1. A device for delivering a supply of gases to a user comprising or including:
an interface including a hollow body, a gases inlet and a sealing member configured
to in use rest against the face of a user, adapted in use to supply gases to said user,
5 a conduit supplying said gases to said interface, said conduit attached to an inlet to
said hollow body, and
headgear adapted to attach to said interface and around the head of said user,
where said conduit is supported in relation to said headgear such that any load on
said conduit is taken by said headgear and not said interface.
- 10 2. A device according to claim 1 wherein said there is a sliding connection between
said headgear and said interface when said interface is engaged with said user.
3. A device according to claim 1 or 2 wherein said hollow body has a forehead rest
with harnessing slots to secure said hollow body to said headgear.
4. A device according to claim 1 wherein said conduit includes a first conduit
15 connected to a second conduit that attaches to the inlet of said interface.
5. A device according to claim 3 wherein said second conduit is more flexible than
said second conduit.
6. A device according to any one of claims 1 to 4 wherein said headgear has a
plurality of hook and loop attachments that enable connection of said headgear to said
20 interface.
7. A device according to claim 1 wherein said conduit is attached to said headgear by
fastening means.
8. A device according to any one of claims 1 to 7 wherein said headgear includes a
transverse strap which in use lies on top of said user's head.
- 25 9. A device according to claim 8 wherein said transverse strap includes said fastening
means.
10. A device according to claim 9 wherein said fastening means is a hook and loop
attachment.
11. A device according to any one of claims 8 to 10 wherein said transverse strap is
30 connected said forehead rest by a telescopic extension mechanism.
12. A device according to any one of claims 8 to 10 wherein said transverse strap is
connected said forehead rest by an adjustable glider mechanism.
13. A device according to claim 7 wherein said headgear includes a plurality of straps
including at least one side strap that said conduit is attached to by said fastening means.

14. A device according to claim 1 wherein said headgear attaches to said interface by a sliding strap.

15. A device according to claim 14 wherein said headgear includes a sling to support said conduit and in use is adapted to connect around said conduit.

16. A device according to claim 14 wherein said sliding strap attaches to said conduit to provide support to said conduit.

17. A device according to claim 14 wherein said device includes an additional strap attachment between said headgear and said conduit to restrain said conduit from moving.

18. A device according to claim 1 wherein said headgear includes adjustment means to adjust the vertical distance between said headgear and said interface.

19. A device according to claim 18 wherein said adjustment means is substantially tubular housing that restrains said conduit but allows said conduit to move through it.

20. A device according to claim 19 wherein said conduit includes a plurality of detents and said housing includes a protrusion that interacts with said detents when said conduit is moved to adjust the vertical distance between said headgear and said interface.

21. A device according to any one of claims 1 or 18 to 20 wherein said conduit includes at least one angular adjustment means to allow for adjustment of said interface.

22. A device according to claim 21 wherein said angular adjustment means is at least one joint and said joint is a ball and socket joint.

23. A device according to claim 21 wherein said at least one joint is two ball and socket joints having rectangular profiles to limit pivoting of each of said joints through one axis.

24. A device according to claim 21 wherein said at least one angular adjustment means is a section of flexible conduit.

25. A device according to claim 24 wherein said flexible conduit includes a malleable band.

26. A device according to claim 1 or 18 to 25 wherein said headgear includes a transverse strap including a support portion capable of receiving said conduit to support and decouple movement of said conduit from said interface.

27. A device according to claim 26 wherein said support portion is curved in shape and has an upper arm and lower arm, said upper arm being more flexible than said lower arm, each of said arms receive said conduit and supporting said conduit above said headgear.

28. A device according to claim 26 wherein said support portion is an elongate member capable of restraining said conduit.

29. A device according to claim 1 or 18 to 28 wherein said headgear is comprised of a forward substantially rigid part and a backward soft part.

30. A device according to claim 29 wherein said forward substantially rigid part includes a substantially rigid layer and a padding layer.

5 31. A device according to claim 30 wherein said padding layer is removable from said rigid layer.

32. A device according to claim 29 wherein said backward soft part is formed of a stretchable, breathable material.

10 33. A device according to any one of claims 1 or 18 to 32 wherein said headgear includes tightening means that allows the adjustment of said backward soft part.

34. A device according to claim 33 wherein said tightening means is a length of elastic attached to said forward substantially rigid part but extending over said backward soft part and a toggle which said length of elastic is capable in use of being pulled through to tighten said backward soft part in relation to said forward substantially rigid part.

15 35. A device for delivering a supply of gases to a user as herein described with reference to the accompanying figures.